

SEQUENCE LISTING

<110> Japan Science and Technology Agency

<120> Genetic markers that link to genes associated with Fusarium head blight resistance, and use thereof

<130> A181-09PCT

<150> JP 2004-014839

<151> 2004-01-22

<150> JP 2004-270268

<151> 2004-09-16

<160> 56

<170> PatentIn Ver. 2.1

<210> 1

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 1

agagatccct gctcagcttg

20

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 2

tcgtattaag gccgcatagg

20

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 3

gcacgtagcg ttcaacatca

20

<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 4

aacttttccc aaccctttcc

20

<210> 5

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 5

ccgtgtgtcg tctaggtcaa

20

<210> 6

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 6

caacttttgt gggacgtagg

20

<210> 7

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 7

gttttcgcca tcactcttcc

20

<210> 8
<211> 208
<212> DNA
<213> *Hordeum vulgare*

<400> 8
gcacgtagcg ttcaacatca catctcatct ttggcaaaag aaatgggtcaa tcggcacact 60
ctcagttttt tgcaccaaaa tgtcccatga gaccaccaac atgtgcttcc cgcaatagta 120
gtaaacgaac aaagcaatct agaatgcata gtttgtttagc acgaaacagg aaaccatcat 180
gcacataaaa cttttcccaa ccctttcc 208

<210> 9
<211> 208
<212> DNA
<213> *Hordeum vulgare*

<400> 9
gcacgtagcg ttcaacatca catctcatct ttggcaaaag aaatgggtcaa tcggcacact 60
ctcagttttt tgcaccaaaa tgtcccatga gaccaccaac atgtgcttcc cgcaatagta 120
gtaaacgaac aaagctatct agaatgcata gtttgtttagc acgaaacagg aaaccatcat 180
gcacataaaa cttttcccaa ccctttcc 208

<210> 10
<211> 335
<212> DNA
<213> *Hordeum vulgare*

<400> 10
ccgtgtgtcg tctaggtcaa ccatgacaac aactacgtgt ggtcgtgact ttggcctgct 60
gttgtcacct caccatggat tgttgtctcc atcaaaagtt atttgtgaga gtttcatctc 120
tgcagatctg gtggttgact ttggtggcat gatcataact atggacggag tcttgatccg 180
gagggatggt tgtgcgcaa cgaaggtcac attgcatgta attgttcnga tcacggaaga 240

gtgatggcga aaacacatga gtgacttcaa tgggtggtgtt acttcagtat ccggtatcaa 300
gcttcanggc aaaagcctac gtcccaccaa agttg 335

<210> 11

<211> 335

<212> DNA

<213> Hordeum vulgare

<400> 11

ccgtgtgtcg tctaggtcaa ccatgacaac aactacgtgt ggtcgtgact ttggcctgct 60
gttgtcacct caccatggat tgtggtctcc atcaaaagtt atttgtgaga gtttcatctc 120
tgcagatctg gtggttgact ttggtggcat gatcataact atggacggag tcttgatccg 180
gagggatggg tgtgcgccaa cgaaggtcac attgcatgta attgttcnga tcacggaaga 240
gtgatggcga aaacacatga gtgacttcaa tgggtggtgtt acttcagtat ccggtatcaa 300
gcttcanggc aaaagcctac gtcccaccaa agttg 335

<210> 12

<211> 254

<212> DNA

<213> Hordeum vulgare

<400> 12

ccgtgtgtcg tctaggtcaa ccatgacaac aactacgtgt ggtcgtgact ttggcctgct 60
gttgtcacct caccatggat tgtggtctcc atcaaaagtt atttgtgaga gtttcatctc 120
tgcagatctg gtggttgact ttggtggcat gatcataact atggacggag tcttgatccg 180
gagggatggg tgtgcgccaa cgaaggtcac attgcatgta attgttcnga tcacggaaga 240
gtgatggcga aaac 254

<210> 13

<211> 254

<212> DNA

<213> Hordeum vulgare

<400> 13

ccgtgtgtcg tctaggtcaa ccatgacaac aactacgtgt ggtcgtgact ttggcctgct 60
gttgtcacct caccatggat tgttgtctcc atcaaaagtt atttgtgaga gtttcatctc 120
tgcagatctg gtggttgact ttggtggcat gatcataact atggacggag tcttgatccg 180
gagggatggt tgtgcggcaa cgaagggtcac attgcatgta attgttcnga tcacggaaga 240
gtgatggcga aaac 254

<210> 14

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 14

ctcgtagact gcgtacc 17

<210> 15

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 15

aattggtacg cagtctac 18

<210> 16

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 16

gacgatgagt cctgag

16

<210> 17

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 17

tactcaggac tcac

14

<210> 18

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 18

gactgcgtac caattc

16

<210> 19

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 19

gatgagtcct gagtaa

16

<210> 20

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 20

gactgcgtac caattcccg

19

<210> 21

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 21

gatgagtcct gagtaaacg

19

<210> 22

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 22

ccgttgacaca ggaaggag

18

<210> 23

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 23

cccatagacc ggactgtt

18

<210> 24

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 24

aattagcgag aacaaaatca c

21

<210> 25

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 25

agataacgat gcaccacc

18

<210> 26

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 26

gacacaggac ctgaagcaca

20

<210> 27

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 27

cggcaggctc tactatgagg

20

<210> 28

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 28

cagcatatcc atctgatctg

20

<210> 29

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 29

cacccttatt tattgcctta a

21

<210> 30

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 30

tccatgttcc cagctacaca

.20

<210> 31

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 31

aggaacacat tggttctggc

20

<210> 32

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 32

gatgagtcct gagtaaatac 19

<210> 33

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 33

gactgcgtac caattctga 19

<210> 34

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 34

gatgagtcct gagtaaatac 19

<210> 35

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially

Synthesized Primer Sequence

<400> 35

gactgcgtac caattcgcg

19

<210> 36

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 36

gatgagtcct gagtaaacg

19

<210> 37

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 37

gactgcgtac caattccgt

19

<210> 38

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 38

gtcgggctcc attgctct

18

<210> 39

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 39

ccggtaccca gtgacgac

18

<210> 40

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 40

atacatgcat gccattgtgg

20

<210> 41

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 41

atccatccac tgtttgaggg

20

<210> 42

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 42

tgctctgcat ttcattcagc

20

<210> 43

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 43

cagcgttaca ggcattctca

20

<210> 44

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 44

gatgagtcct gagtaaata

19

<210> 45

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 45

gactgcgtac caattcagc

19

<210> 46

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 46

ccggtcggtg cagaagag

18

<210> 47

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 47

aaatgaaagc taaatgggcg atat

24

<210> 48

<211> 251

<212> DNA

<213> Hordeum vulgare

<220>

<221> n

<222> (7)

<220>

<221> n

<222> (17)

<220>

<221> n

<222> (29)

<220>

<221> n
<222> (47)

<220>
<221> n
<222> (98)

<400> 48
ttacagntat aataggnggt ttcagttgnt agtgcttitta caacagnaat agaagggttt 60
cactgtgaat ccacaacata tcaagtggta cacatagnac catgtcattc atacatgcat 120
gccattgtgg ggagaagcac aggtgggtgg gaaattccct ctccctcaaag agaagatgtg 180
gctatgcctt gagcatccgc aggtagtctt cgattatgga catggctgac gagcggtacc 240
cagagccgaa a 251

<210> 49
<211> .251
<212> DNA
<213> Hordeum vulgare

<220>
<221> n
<222> (35)

<220>
<221> n
<222> (37)

<400> 49
tgttgggaca tggagctgca gctcttgca aacnancctc ctctgctctg catttcattc 60
agcaaataaa ctcatggcct tgctgctgct tccctaaaac ctaaagacta gcaactactg 120
gtacacgcaa cctcctcctc catctctagc tatgaacaag gtaaattttac ccaccttttc 180
tatcacaaaa aaaatatgaa caccaagccg aatcacgact gagaatttta cacaatgata 240
atcgctcagc c 251

<210> 50
<211> 249
<212> DNA
<213> Hordeum vulgare

<220>
<221> n
<222> (19)

<400> 50
acaagcgcac attttaatnc ttattatcgc tcactcactc gaagagttgc gtattaaaat 60
tacactaaaa acctaacagc tcagctagct aagctcctcc tcaaccatca acatgggaac 120
aatccatgtt cccagctaca catatgatac atacatcagc taagctcttc tagcaaccca 180
accaatgacc ctggttggat tcagaagttg ctcttgctcg tcgaaggett cgacctcttg 240
ctgttgagc 249

<210> 51
<211> 21
<212> DNA
<213> Hordeum vulgare

<400> 51
gaaaacatgc aggtgaactc a 21

<210> 52
<211> 21
<212> DNA
<213> Hordeum vulgare

<400> 52
gaaaacatgc cggtgaactc a 21

<210> 53

<211> 21

<212> DNA

<213> Hordeum vulgare

<400> 53

gcgggcgccg cgggtcgagc g

21

<210> 54

<211> 21

<212> DNA

<213> Hordeum vulgare

<400> 54

gcgggcgccg tgggtcgagc g

21

<210> 55

<211> 519

<212> DNA

<213> Hordeum vulgare

<400> 55

agcactccag tgttggggca ttgtcgactt cagtgcacgg ccatctcaca acaagcagca 60
accgcttgat gggaacatgt ttattaacta tatcgtcagg aagtgtgtg accttgcat 120
tcagatgaac aagacagcat gttttgtgca tctatcagaa atgtcagtgc tatcgatcc 180
acaccaactg cacgaggagc tgaacaaagc aaagcaggct gcggtgaaga agaaccagaa 240
gttgcaactc ctcttctgcc cgatgtctga gcagcatcat gggtaacaaga cactgaagct 300
gatctgcgag acgcagctgg ggatccaaac ccagtgtttc ttgagccacc tcgcaaaca 360
aaccagggc caggaccagt acatgtccaa tcttgctctc aagatcaacg gcaagctcgg 420
gggcatcaac acccagctcc aggacaagct cccactggac aacggtgttc cttacatgtt 480
cataggcgca gacgtgaacc acccatcacc tgggaatgg 519

<210> 56

<211> 538

<212> DNA

<213> Hordeum vulgare

<220>

<221> n

<222> (41)

<400> 56

```
agtcgctcgt tgtggctttg catatcatca gactggcaag nggccaggca accacataac 60
tatagtataa aagacacaga cctgaagcac acgcacaatg acagaaccag caatacgttc 120
caagttcaaa gttcagacca tacgaaacag ttcggagtag atgttctacc ggaccaagtt 180
cagaccatat gaagcagtct gtatatatgt tctaccggac caagttcaga ccatatgaag 240
cagtctgtat atatgttcta ccggaccaag ttcagaccat atgaagcagt ctgtatatat 300
gttctaccgg accaagacgc taagcggcac cggtgagaag ccggcgtag atgaagaaca 360
tggtgtcctg aagatccacg tgcagcgtag ggaagttgct gaagtcacaa gccccgccc 420
ctgtggagga ggccgacgac gacgagctgc gcacctgggg ctgggacgcc agcatgccct 480
catagtagag cctgccgcgg tacgcccca ggtcggcgta gtagacgggc gtcgccag 538
```